KHALABUDA, T. V.

"On Certain Physiological Peculiarities and Fermentative (Enzymatic?) Activity in Species of Penicillium Link, Pathogenic to Wheat Kernels," Mikrobiol Zhur, Kiev, 1951, Vol XIII, No 1

Mikrobiologiya, Vol XX, No 5, 1951.

W-24635

KHALABUDA, T.

PIDOPLICHKO, M.; BILAY, V.; GOMOLYAKO, M.; KHALABUDA, T.

L.I. Kursanov; obituary. Mikrobiol. zhur. 17 no.2:77-78 '55

(KURSANOV, LEV IVANOVICH, 1877-1954)   (MLRA 10:5)

KHALABUDA, T.V.; ZHDANOVA, N.N.

Species of the genus Mortierella in the pine-oak forest
soils of the environs of Kiev. Ukr. bot. zhur. 14 no.1:60-69
'57.

(MLRA 10:5)

1. Institut mikrobiologii AN URSR, viddil mikologii.
(Kiev Province--Soil micro-organisms)
(Forest soils)

KHALABUDA, T.V.

Basic results of studying the rhizosphere mycoflora of winter wheat in the southern Ukraine. Mikrobiol.zhur. 20 no.2:11-25 '58

(MIRA 11:7)

1. Z Institutu mikrobiologii AN URSR.
    (UKRAINE--RHIZOSPHERE MICROBIOLOGY)
    (WHEAT)

KHALABUDA, T.V.

Principal rhizosphere fungi of winter wheat in the southern
part of the Ukraine. Mikrobiol.zhur. 20 no.3:10-17 '58
(MIRA 11:11)

1. Iz Instituta mikrobiologii AN USSR.
   (UKRAINE—RHIZOSPHERE MICROBIOLOGY)
   (WHEAT)

30(1)

AUTHOR: Khalabuda, T.V.   SOV/21-59-2-24/26

TITLE: Mortierella Alpina Peyronel from the Rhizospheres of
            Winter Wheat (O Mortierella Alpina Peyronel iz rizo-
            sfery   ozimoy pshenitsy)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 2,
            pp 208-213 (USSR)

ABSTRACT: The author announces for the first time the exist-
            ance of the above named mushroom in the rhizospheres
            of winter wheat grown in the steppes of the southern
            Ukraine. Over a period of eight years, he checked
            a great many similar species, and now gives (on page
            210) a consolidated chart on this class of mushrooms.
            The author offers a general description of the mush-
            room. He also briefly mentions that the sporula-
            tion of this species was for the first time obtain-
Card 1/2   ed by Sacsena's   method /Ref 17/, which consisted
            of transplanting pure agar into sterile distilled

Morticrella Alpina Peyronel from the Rhizospheres of Winter Wheat   SOV/21-59-2-24/26

water, where after 3 days it showed a thin growth of mushroom spawn. There are 2 diagrams, 1 photograph, 1 table and 18 references, 8 of which are Soviet, 6 German, 2 French and 2 English.

ASSOCIATION: Institut mikrobiologii AN UkrSSR (Institute of Microbiology of the AS UkrSSR)

PRESENTED: By V.G. Drobot'ko, Member of the AS UkrSSR

SUBMITTED: November 5, 1958

Card 2/2

KHALABUDA, T.V.

Variability of Mortierella alpina Peyronel from the rhizosphere
of winter wheat. Mikrobiol.zhur. 21 no.2:20-34 '59.

1. Z Institutu mikrobiologii AN URSR.   (MIRA 12:9)
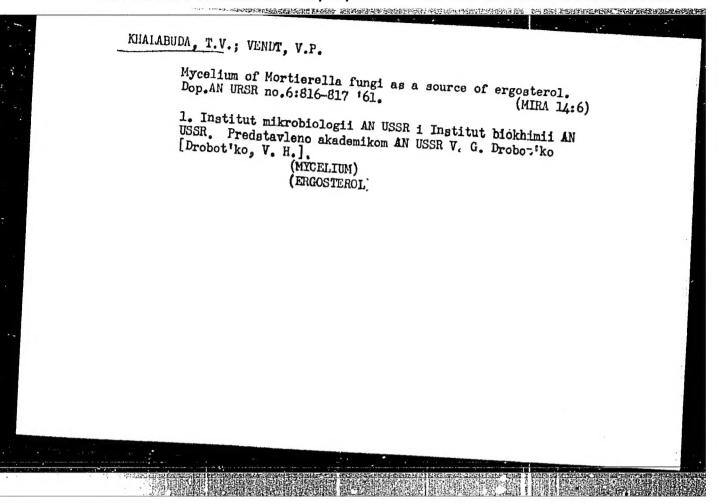   (FUNGI)   (RHIZOSPHERE MICROBIOLOGY)

KHALABUDA, T.V.

Mortierella marburgensis Linneman from the rhizosphere of winter
wheat. Mikrobiol.zhur. 21 no.3:9-12 '59.   (MIRA 12:10)

1. Z Institutu mikrobiologii AN URSR.
                  (RHIZOSPHERE MICROBIOLOGY)

KHALABUDA, T.V.

New species of the genus Mortierella coemans. Mikrobiol. zhur.
27 no.2:29-31 '65.

1. Institut mikrobiologii i virusologii AN UkrSSR.

KHALABUDA, T.V.; VENDT, V.P.

Mycelium of Mortierella fungi as a source of ergosterol.
Dop.AN URSR no.6:816-817 '61.
(MIRA 14:6)

1. Institut mikrobiologii AN USSR i Institut biokhimii AN
USSR. Predstavleno akademikom AN USSR V. G. Drobot'ko
[Drobot'ko, V. H.].
(MYCELIUM)
(ERGOSTEROL)

KHALABUDA, T.V.

A new species of Mortierella ovalispora and its varieties from the section Elongata. Mikrobiol. zhur. 27 no.4:28-31 '65.

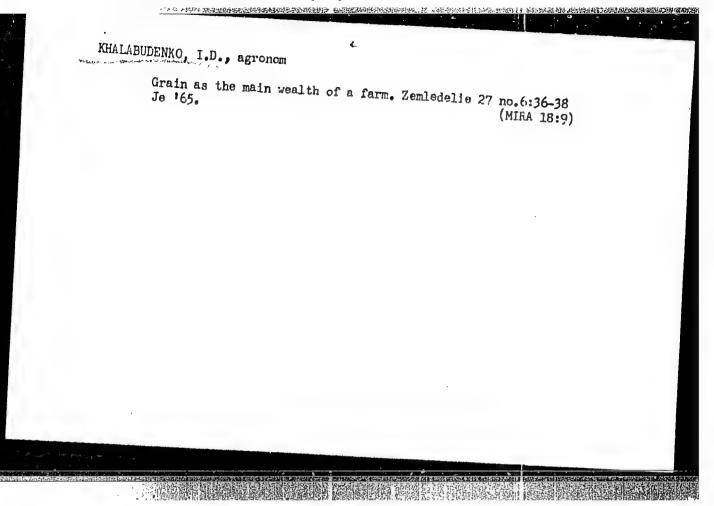1. Institut mikrobiologii i virusologii AN UkrSSR.

(MLtA 18:8)

KHALABUDENKO, I.

Study of the economic factors. Prof. -tekhn. obr. 13 no.8:4-5
Ag '56.

(MLRA 9:10)

1. Prepodavatel' Pokrovskogo uchilishcha mekhanizatsii
sel'skogo khozyaystva No. 5. (Dneprovskaya oblast).
(Farm mechanization--Study and teaching)

KHALABUDENKO, I.D., agronom

Grain as the main wealth of a farm. Zemledelie 27 no.6:36-38
Je '65.
(MIRA 18:9)

KHALABUZAR', A.M.; MASLENNIKOVA, V.P.

Clinical aspects and pathogenesis of hemorrhagic telangiectasis.
Sov. med. 18 no.11:33-34 N '54.
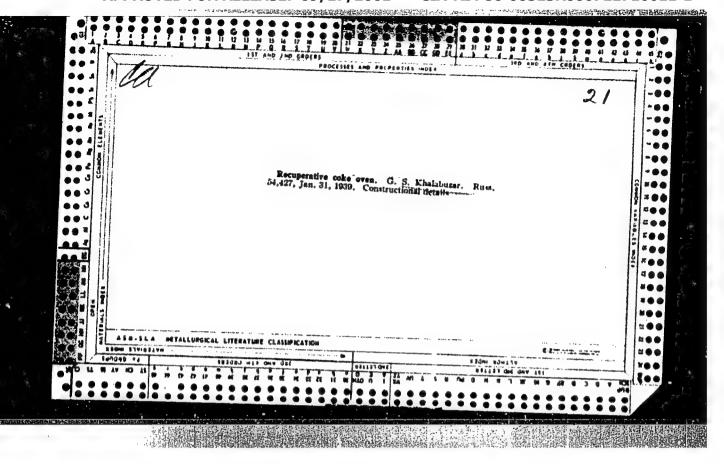
(MLRA 7:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki (dir.-prof. P.E.
Lukomskiy) II Moskovskogo med. instituta imeni I.V.Stalina.
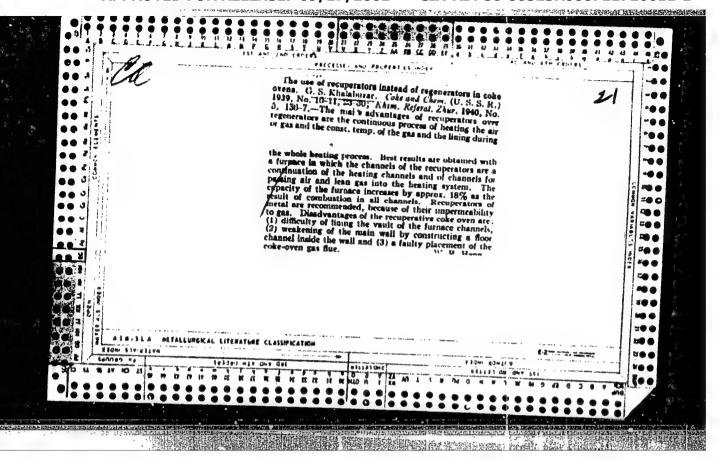(TELANGIECTASIS
hemorrhagic, clinic & pathogen.)
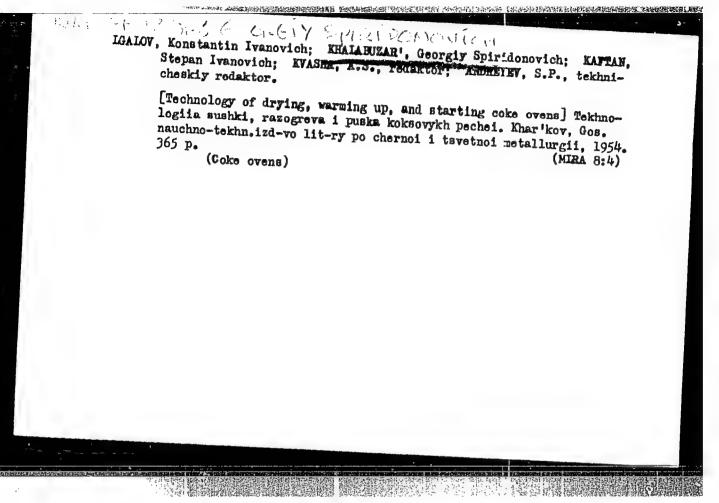
TRUB, I.A.; OVENKO, F.A.; KHALABUZAR', A.T.

Thermal calculations of coke-oven gas cooling systems. Zbir. prats' Inst. tepl. AN URSR no.24:53-61 '62.
(MIRA 16:3)
(Coke-oven gas—Cooling)

21

PROCESSES AND PROPERTIES INDEX

Recuperative coke oven.   G. S. Khalabuzar.   Russ.
54,427, Jan. 31, 1939. Constructional details.

A.S.B.-I.L.A.   METALLURGICAL LITERATURE CLASSIFICATION

The use of recuperators instead of regenerators in coke ovens. G. S. Khalabuzar. Coke and Chem. (U. S. S. R.) 1939, No. 10-11, 23-30; Khim. Referat. Zhur. 1940, No. 5, 130-7.—The main advantages of recuperators over regenerators are the continuous process of heating the air or gas and the const. temp. of the gas and the lining during the whole heating process. Best results are obtained with a furnace in which the channels of the recuperators are a continuation of the heating channels and of channels for passing air and lean gas into the heating system. The capacity of the furnace increases by approx. 18% as the result of combustion in all channels. Recuperators of metal are recommended, because of their impermeability to gas. Disadvantages of the recuperative coke oven are: (1) difficulty of lining the vault of the furnace channels, (2) weakening of the main wall by constructing a floor channel inside the wall and (3) a faulty placement of the coke-oven gas flue.

21

IGALOV, Konstantin Ivanovich; KHALABUZAR', Georgiy Spiridonovich; KAFTAN,
Stepan Ivanovich; KVASHA, A.S., redaktor; ANDREYEV, S.P., tekhni-
cheskiy redaktor.

[Technology of drying, warming up, and starting coke ovens] Tekhno-
logiia sushki, razogreva i puska koksovykh pechei. Khar'kov, Gos.
nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1954.
365 p.

(Coke ovens)   (MIRA 8:4)

KHALABUZAR', G.S.

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.; ZASHVARA, V.G.; LITVINENKO, M.S.;MEDVEDEV, K.P.; MOLODTSOV, I.G.; LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.; DMITRIYEV, M.H.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVYAKIN, A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-SKIY, Ya.M.; KOTKIN,A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.; SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.; KUSHNEREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.; MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.; GOFTMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.; KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAFTAN, S.I.; CHERMNYKH, M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.; SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55.(MLRA 9:3)
(Kustov, Boris Iosifovich, 1910-1955)

KHALABUZAR', G.S., kandidat tekhnicheskikh nauk.

Uniflow coke ovens with recuperators in place of regenerators.
Koks i khim. no.7:20-23 '56.   (MLRA 9:12)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.
       (Coke ovens)

S/081/62/000/007/002/033
B156/B101

AUTHORS: Sus, A. N., Khalabuzar', L. S.

TITLE: Vibration method of measuring the viscosity of liquids

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 7, 1962, 44,
                abstract 7B281 (Uch. zap. Saratovsk. un-t, v. 69,
                1960, 249-252)

TEXT: It is proposed that a vibration pressure gauge, which employs the
relationship between the viscosity of a gas and the pressure (Dushman.
Nauchnyye osnovy vakuumnoy tekhniki, IL, 1950; Yakkel'. Polucheniye i
izmereniye vakuuma, 1952), should be included in the system developed by
the authors for measuring the viscosity of liquids. Viscosities of liquids
measured by this method proved to be equal (in cp): benzene, 0.62;
toluene, 0.54; ethyl ether, 0.25; carbon tetrachloride, 0.92; hexane,
0.29; heptane, 0.37; octane, 0.5; nonane, 0.66; and cyclohexane, 0.84.
The authors conclude that the method proposed is suitable for the
measurement of low viscosities. It is not suitable for conductive
liquids. The method is particularly well suited to the investigation of

Card 1/2

Vibration method of measuring ...

S/081/62/000/007/002/033
B156/B101

liquids belonging to particular homologous series. The method is relative
and requires preliminary calibration. [Abstractor's note: Complete
translation.]

Card 2/2

S/153/60/003/004/026/040/XX
B020/B054

AUTHORS: Zasorin, A. P., Khalabuzar', V. G., Pizin, Ye. I.

TITLE: Kinetics of Ammonia Synthesis on an Iron Catalyst With Addition of Uranium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4, pp. 695 - 698

TEXT: The authors studied the effect of an addition of a natural radio-active substance, uranium, on the catalytic activity of an industrial catalyst. They compared the catalyst with uranium addition with an in-dustrial catalyst of the type "Б" ("B") (2% K_2O and 4% Al_2O_3) and with the catalyst of the type "БТ" ("BT") with increased Al_2O_3 content (2% K_2O and 11-12% Al_2O_3). The catalyst investigated was produced by sintering an industrial catalyst with uranyl nitrate $UO_2(NO_3)_2 \cdot 6H_2O$, the finished catalyst containing 5% of UO_3. The investigations were

Card 1/3

Kinetics of Ammonia Synthesis on an Iron   S/153/60/003/004/026/040/XX
Catalyst With Addition of Uranium   B020/B054

conducted in a device schematically shown in Fig.1. Fig.2 shows the am-
monia yield as dependent on the volume rate at different contact tem-
peratures on the iron catalyst, while Fig.3 illustrates the ammonia
yield as dependent on temperature at different volume rates on the iron
catalyst. At equal conditions, the reaction rate of ammonia synthesis
is higher on the iron catalyst with uranium promoter than on an ordinary
catalyst; this is confirmed by the rate constants (Table) calculated
from the equation by M. I. Temkin and V. M. Pyzhev (Refs. 4-6)

$k = P^{0.5} \cdot V_z(1+z) \cdot I_{(z)}$, where z is the molar fraction of ammonia, P the
pressure in the system, V_z the volume rate at the outlet, and

$$I_{(z)} = \int_0^z \left[z(1-z)^{1.5} \cdot dz \right] / \left\{ (1+z)^3 \left[L^2 (1-z)^4 z^2 \right] \right\} ; \quad L = z_{eq}/(1 - z_{eq})^2.$$

Fig. 4 shows X-ray pictures of samples of various catalysts. The data
given show that a uranium addition to the industrial iron catalyst for
ammonia synthesis in relatively small quantity (5% referred to UO_3)
effects a completer reduction of iron oxides to the catalytically most

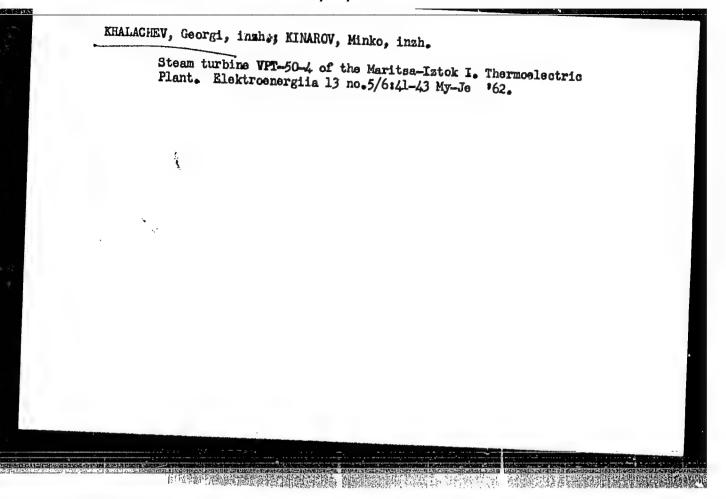Card 2/3

KHALABUZAR', V.I., inzh.

Elements of the theory and design of drum-screw separators for harvesting potatoes. Trakt. i sel'khozmash. 32 no.1:26-28 Ja '62. (MIRA 15:2)
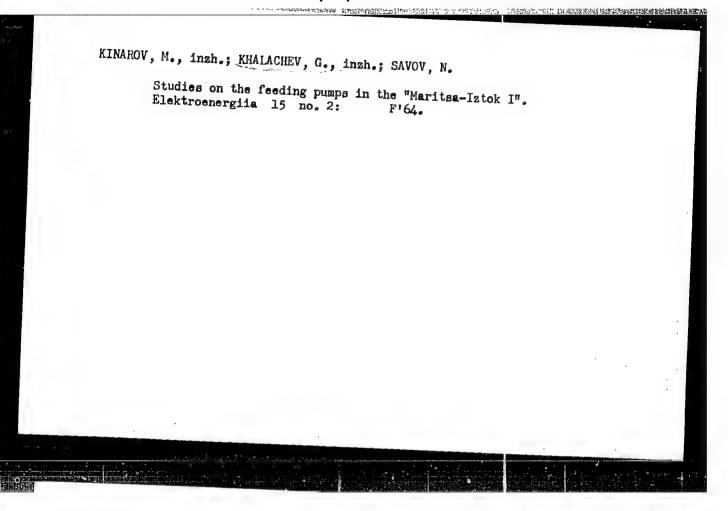
1. Leningradskiy sel'skokhozyaystvennyy institut.
(Potato digger (Machine))

PETROV, D., kand. tekhn. nauk; KHALABUZAR', V.I., kand. tekhn. nauk

Studying a centrifugal drum-screw separator for a potato harvesting machine. Trudy VISKHOMa no.40:3-41 '63.   (MIRA 17:9)

KHALACHEV, Georgi, inzh.; KINAROV, Minko, inzh.

Steam turbine VPT-50-4 of the Maritsa-Iztok I. Thermoelectric
Plant. Elektroenergiia 13 no.5/6:41-43 My-Je '62.

KINAROV, M., inzh.; KHALACHEV, G., inzh.; SAVOV, N.

Studies on the feeding pumps in the "Maritsa-Iztok I".
Elektroenergiia 15 no. 2:   F'64.

KHALACHEV, Vl., vrem. prepodavatel na ochni'bolesti i st. asistent

Ocular manifestations of sulfonamide intoxication. Khirurgiia
7 no.2:114-118 1954.

1. Meditsinska akademiia I.P.Pavlov, Plavdiv. Klinika po ochni
bolesti. Vr. direktor: dots. M.Botusharov.
        (EYE, in various diseases,
          *sulfonamide pois.)
        (SULFONAMIDES, injurious effects,
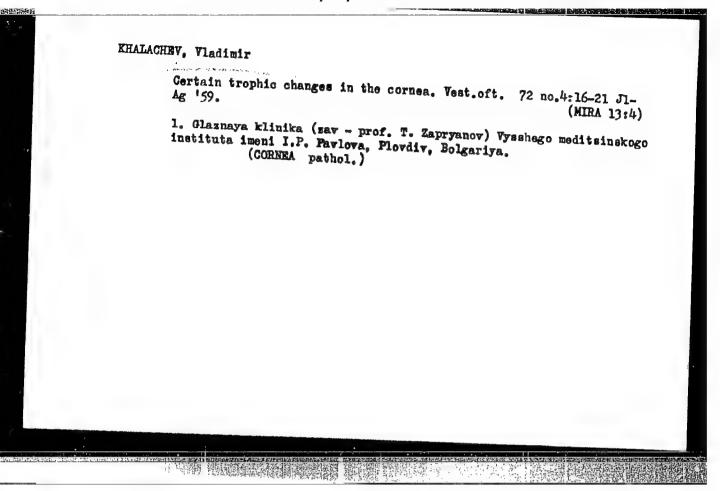   *manifest., eyes)

KHALACHEV, V.

Ophtalmomyiasis. Khirurgiia, Sofia 8 no.1:61-63 1955

1. Vissh meditsinski institut "I. P. Pavlov" - Plovdiv Klinika
po ochni bolesti Vr. direktor: dots. M. Botusharov.
        (EYE, diseases,
           ophthalmomyiasis)
        (MYIASIS,
           ophthalmomyiasis)

KHALACHEV, V. D-r.; VASILEV, V. D-r.; MATEV, S. D-r.; KOEN, E. D-r.

Trachoma in the Plovdiv region according to data from ophthalmological clinics observed from 1949-1952. Izv. Mikrob. inst., Sofia no.8:569-586 1957.

1. Ochna klinika (vr. zav.: prof. T. Zaprianov) pri visshiia meditsinski institut I. P. Pavlov v Plovdiv.
        (TRACHOMA, epidemiol.
              in Bulgaria (Bul))

KHALACHEV, Vladimir

Certain trophic changes in the cornea. Vest.oft. 72 no.4:16-21 Jl-Ag '59.

(MIRA 13:4)

1. Glaznaya klinika (zav - prof. T. Zapryanov) Vysshego meditsinskogo instituta imeni I.P. Pavlova, Plovdiv, Bolgariya.

(CORNEA pathol.)

KHALACHEV, V.I.

A simplified method of determining the best variants of a multiple field with odd number of groups. Godishnik mash elekt 13 no.2:119-130 '63[publ. '64].
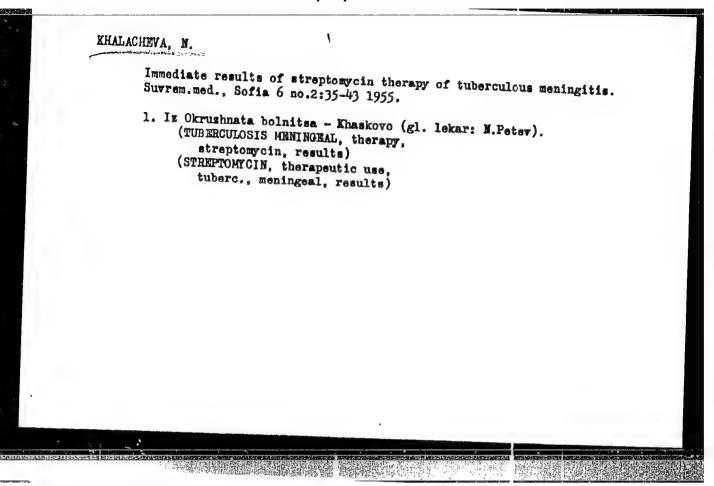
KHALACHEV, V.I.; IVANOV, V.P.; EMANUILOV, E.G.

Experimental determination of optimum values in the resistances of electroacoustic transformers of the MB-type telephone apparatus. Godishnik mash elekt 13 no.2:131-140 '63 [publ. '64]

MAKARSKI, V.I.; TODOROV, P.M.; KHALACHEV, V.I.

Another method of computing the impedance-conforming L-networks.
Godishnik mash elekt 13 no.2:149-160   '63 [publ. '64]

KHALACHEVA, N.

Immediate results of streptomycin therapy of tuberculous meningitis.
Suvrem.med., Sofia 6 no.2:35-43 1955.

1. Iz Okruzhnata bolnitsa - Khaskovo (gl. lekar: N.Petev).
    (TUBERCULOSIS MENINGEAL, therapy,
        streptomycin, results)
    (STREPTOMYCIN, therapeutic use,
        tuberc., meningeal, results)

KHALACHEVA, N.

Clinical results of the treatment of pulmonary manifestations of tuberculosis with streptomycin. Suvrem. med., Sofia 6 no.12:42-54 1955.

1. Iz grudnoto otdelenie pri Okruzhnata bolnitsa-gr. Khaskovo (gl. lekar: N. Petev).
    (STREPTOMYCIN, therapeutic use,
     tuberc., pulm. (Bul))
    (TUBERCULOSIS, PULMONARY, therapy,
     streptomycin. (Bul))

06464

AUTHORS: Khaldre, Kh.Yu. and Khokhlov, R.V.
              SOV/141-1-5-6-8/28
TITLE: The Stability of Oscillation in a Molecular Oscillator
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
              1958, Vol 1, Nr 5-6, pp 60 - 65 (USSR)

ABSTRACT: Any investigation of the stability of molecular
              oscillations must be based on how the polarisation of a
              molecular beam varies in an alternating electric field of
              varying amplitude and phase. Suitable equations have been
              derived both in the work of A.V. Orayevskiy (Ref 5),
              V.S. Troitskiy (Ref 6) and G.N. Lyubimov and R.V. Khokhlov
              (Ref 4); the latter set is more complicated and will be
              the subject of another article; the former set is used
              here (1.1); they can be interpreted as representing two
              weakly damped oscillators with frequency of the resonator
              and of the molecular transition, respectively, which
              interact through a non-linear coupling of time constant τ.
              The method of Van der Pol is appropriate here, the field
              strength and the polarisation being represented as
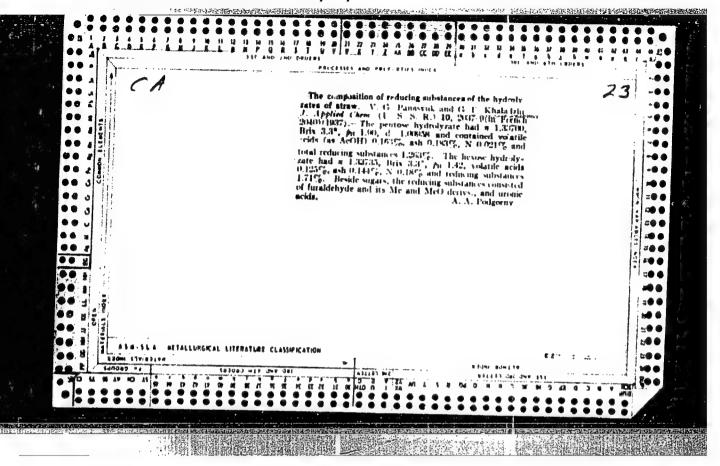   oscillations with slowly changing amplitude and phase,
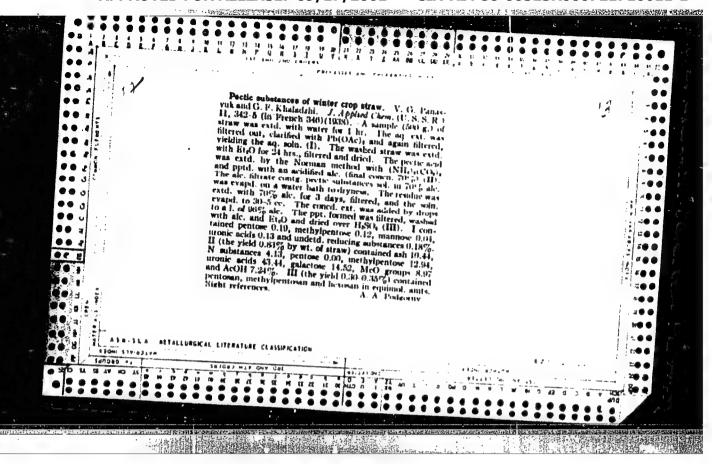Card1/3   as in Eq (1.4). The stationary values of field amplitude E
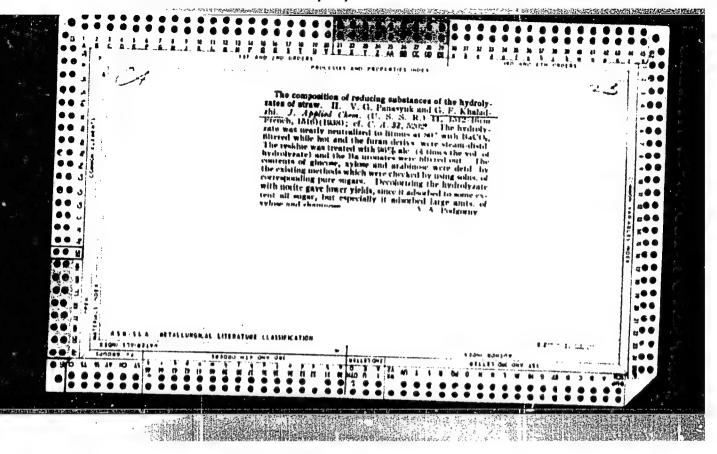
06464

The Stability of Oscillation in a Molecular Oscillator
SOV/141-1-5-6-8/28

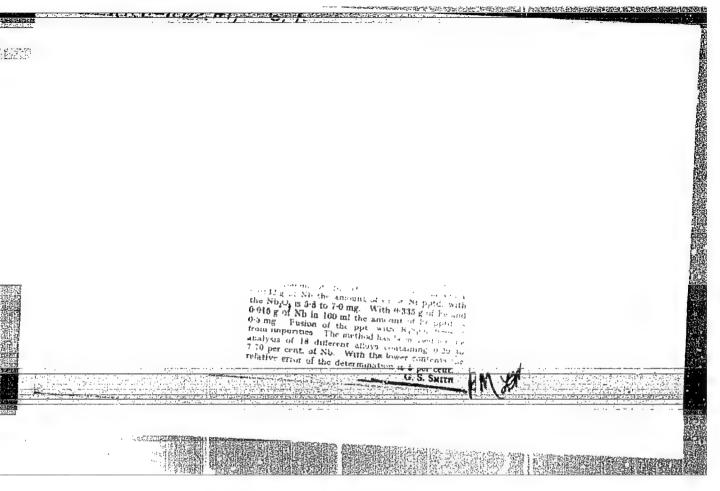   and oscillation frequency ω are given by Eq (1.8),
              corresponding values for the number of molecules leaving
              and entering the resonator are Eqs (1.9 and (1.10). The
              results of this simple derivation agree well with those
              derived in Ref 1 (N.G. Basov and A.M. Prokhorov) by more
              exact methods. The system equation is written most
              succinctly in (2.2). The conditions for stability of
              oscillations are Eq (2.3); these make no appeal to a
              physical understanding of the problem and an alternative
              method is proposed. The abbreviated equations describing
              the transient process are not homogeneous in the sense
              that the right-hand sides of the equation E and ϕ are
              in absolute magnitude significantly greater than the right-
              hand sides of those for P and N. The physical meaning
              is that the steady state is reached rapidly in the E, ϕ
              co-ordinates and slowly in the P, N co-ordinates. The
              stability of each of the subordinate processes may now be
              confirmed separately from the respective conditions (2.8)
Card2/3   and (2.9). In the work of Troitskiy (Ref 6), evidence

CA

23

The composition of reducing substances of the hydroly sates of straw. V. G. Panasyuk and G. F. Khalabudin. J. Applied Chem. (U. S. S. R.) 10, 507-9 (in French 940)(1937).— The pentose hydrolyzate had n 1.3700, Brix 3.3°, Ar 1.00, d 1.00038 and contained volatile acids (as AcOH) 0.163%, ash 0.183%, N 0.021% and

total reducing substances 1.263%. The hexose hydrolyzate had n 1.33735, Brix 3.3°, Ar 1.42, volatile acids 0.125%, ash 0.144%, N 0.18% and reducing substances 1.71%. Beside sugars, the reducing substances consisted of furaldehyde and its Me and MeO derivs., and uronic acids.

A. A. Polgorny

$B8A-SLA$ METALLURGICAL LITERATURE CLASSIFICATION

Pectic substances of winter crop straw. V. G. Panas-yuk and G. F. Khaladzhi. *J. Applied Chem.* (U.S.S.R.) 11, 342-5 (in French 346)(1938). A sample (500 g.) of straw was extd. with water for 1 hr. The aq. ext. was filtered out, clarified with Pb(OAc)₂ and again filtered, yielding the aq. soln. (I). The washed straw was extd. with Et₂O for 24 hrs., filtered and dried. The pectic acid was extd. by the Norman method with (NH₄)₂CO₃, and pptd. with an acidified alc. (final concn. 70%) (II). The alc. filtrate contg. pectic substances sol. in 70% alc. was evapd. on a water bath to dryness. The residue was extd. with 70% alc. for 3 days, filtered, and the soln. evapd. to 30-5 cc. The concd. ext. was added by drops to a l. of 80% alc. The ppt. formed was filtered, washed with alc. and Et₂O and dried over H₂SO₄ (III). I contained pentose 0.10, methylpentose 0.12, mannose 0.04, uronic acids 0.13 and undetd. reducing substances 0.18%. II (the yield 0.81% by wt. of straw) contained ash 10.44, N substances 4.13, pentose 0.00, methylpentose 12.94, uronic acids 43.44, galactose 14.52, MeO groups 8.07 and AcOH 7.24%. III (the yield 0.30-0.35%) contained pentosan, methylpentosan and hexosan in equimol. amts. Eight references.

A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

The composition of reducing substances of the hydroly-
zates of straw. II. V. G. Panevyuk and G. F. Khaladzhi. J. Applied Chem. (U. S. S. R.) 11, 1312-16 (in French, 1816)(1938); cf. C. A. 32, 8362. The hydroly-
zate was nearly neutralized to litmus at 50° with BaCO3, filtered while hot and the furan derivs. were steam-distd. The residue was treated with BaCO3 ale. (4 times the vol. of hydrolyzate) and the Ba arsonates were filtered out. The contents of glucose, xylose and arabinose were detd. by the existing methods which were checked by using solns. of corresponding pure sugars. Decolorizing the hydrolyzate with norite gave lower yields, since it adsorbed to some ex-
tent all sugar, but especially it adsorbed large amts. of xylose and arabinose.

S. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

...2 g of Nb the amount ... Ni ppt'd with the Nb_2O_5 is 5·8 to 7·0 mg. With 0·335 g of Fe and 0·015 g of Nb in 100 ml the amount of ... 0·3 mg Fusion of the ppt with $K_2S_2O_7$ ... from impurities. The method has ... analysis of 18 different alloys containing 0 to ... 7·70 per cent. of Nb. With the lower contents ... relative error of the determination is ... per cent.

G. S. Smith

KARAPETOV, K.A., nauchnyy sotr.; MELIKBEKOV, A.S., nauchnyy sotr.; CHERFAS, A.A.; Prinimali uchastiye: AMIROV, A.D.; BILANDARLY, A.A.; DURMISHYAN, A.G.; LAYTSEV, Yu.V.; KOCHARYANTS, Sh.M.; IBRAGIMOV, E.S.; MASUMYAN, V.Ya.; TAGIYEV, Z.D.; CHERNOMORBIKOV, M.Z.; KHALAFBEKOV, N.Kh.

[Instructions on the hydraulic fracturing of producing and injection wells] Instruktsiia po primeneniiu gidravlicheskogo razryva plasta v neftianykh i nagnetatel'nykh skvazhinakh. Baku, 1959.   58 p.

(MIRA 15:4)

1. Azerbaidzhanskoye nauchno-tekhnicheskoye obshchestvo nefte-gazovoy promyshlennosti. 2. Chleny Azerbaydzhanskogo nauchno-tekhnicheskogo obshchestva neftyanoy promyshlennosti, Azerbaidzhanskiy nauchno-issledovatel'skiy institut po dobyche nefti (for Karapetov, Melikbekov).

(Oil wells—Hydraulic fracturing)

SHUKYUROV, Sh.Z.; AKHUNDZADE, I.R.; ISMAYLOVA, D.B.; SEIDOVA, P.Sh.;
    ISMAYLOVA, T.A.; PARSADANOVA, N.S.; STARIKOVSKAYA, L.M.;
    AKHUNDOV, T.A.; KHALAFLI, E.M.; KARLENKO, S.N.

Results of treating newly detected cases during 1960-61
in the Municipal Antituberculosis Dispensary and methods
of controlling the use of antibacterial preparations by
patients. Azerb. med. zhur. no.7:59-65 Jl '63.

                                        (MIRA 17:1)

KHALAFOV, A.A.

Anesthesia of hard dental tissues. Stomatologiia 40 no.3:21-24 My-Je
'61.
(MIRA 14:12)

1. Iz kafedry terapevticheskoy stomatologii (zav. - prof. Ye.Ye.
Platonov) i kafedry farmakologii (zav. - prof. G.A.Ponomarev)
Moskovskogo meditsinskogo stomatologicheskogo instituta.(dir. -
dotsent G.N.Beletskiy).
(ANESTHESIA IN DENTISTRY)

SARKISOV, A.I.; KHALAFOV, M.S.

Struggle of the workers of Baku for their rights on the eve of the
Revolution of 1905. Uch. zap. AGU no.2:141-152 '57.   (MIRA 11:1)
    (Baku--Strikes and lockouts--Petroleum industry)
    (Collective labor agreements--Petroleum industry)

KHALAFOV, R.

Scientific and Practical out-of-town Conference of the Azerbaijan
Scientific Pharmaceutical Society in Kirovabad. Apt.delo 4 no.1:
52-53 Ja-F '55
                                                    (MLRA 8:4)

1. Upravlyayushchiy Kirovabadskim mezhrayonnym otdeleniyem GAPU
Ministerstva zdravookhraneniya Azerbaydzhanskoy SSR.
        (AZERVAIJAN-PHARAMOCOLOGY-SOCIETIES)

KHILAFOV, T.G.; ABDULLAYEV, V.M.

Some problems of pancreatic lesions in rheumatic fever. Izv.
AN Azerb. SSR. Ser. biol. i med. nauk no.1:69-74 '64.

(MIRA 17:8)

KHALAFOV, T.G.

Glycemic reaction and pancreatic function in rheumatic fever. Azerb.
med. zhur. no. 3:51-56 Mr '61.
(SUGAR IN THE BODY) (PANCREAS) (RHEUMATIC FEVER)
(MIRA 14:4)

KHALAFOV, T.G.

Pancreatic lesions in rheumatism. Izv. AN Azerb. SSR. Ser. biol.
i med. nauk no.5:139-149 '61.
            (RHEUMATISM)   (PANCREAS—DISEASES)   (MIRA 14:8)

KHALAFOV, T.G.

Role of Sokol'skii-Bouillaud's disease in the etiopathogenesis of diabetes. Azerb. med. zhur. no.8:29-35 Ag '61.   (MIRA 15:2)
(HEART DISEASES)   (DIABETES)

KHALAFOVA, R. A.

Khalafova, R. A. "On the problem of developing the Senoman deposits (in the region between the Khachinchay and Gandzhachay rivers of the Central Kavkhaz)," Trudy Yestestv.-ist. muzeya (Academy of Science, Azerbaydzh. SSR), Issues 1-2, 1948, p. 161-66 - Resume in Azerbaydzhian language - Bibliog: 6 items

so: U-3264, 10 April 1953 (Letopis 'Zhurnal 'nykh Statey, no. 3, 1949)

KHALAFOVA, R.A., dotsent.

Upper Cretaceous deposits in the Mardakertsk district of Azerbaijan.
Trudy Azerb.ind.inst. no.7:23-31 '54.   (MIRA 9:9)
          (Azerbaijan--Geology, Stratigraphic)

KHALAFOVA, R.A.

Upper Turonian-lower Coniacian sediments in the Nakhichevan
A.S.S.R. Trudy Azerb. ind. inst. no.18:25-37 '57.   (MIRA 11:7)
              (Nakhichevan A.S.S.R.--Geology, Stratigraphic)

KHALAFOVA, R.A.

Upper Coniacian-Santone sediments in the Nakhichevan A.S.S.R.
Trudy Azerb. ind. inst. no.19:34-42 '57.   (MIRA 11:9)
    (Nakhichevan A.S.S.R.--Geology, Stratigraphic)

KHALAFOVA, R.A.

Upper Senonian sediments of the northwestern Nakhichevan
A.S.S.R. Izv. vys. ucheb. zav.; neft' i gaz 3 no.1:13-18
'60.
(MIRA 14:10).

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.
(Nakhichevan A.S.S.R.—Petroleum geology)

KHALAFOVA, R.A.

Materials on the study of upper Cretaceous sediments in the
Nakhichevan A.S.S.R. Izv. vys. ucheb. zav.; neft' i gaz 3 no.12:
21-26 '60.   (MIRA 14:10)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.
          (Nakhichevan A.S.S.R.--Petroleum geology)

KHALAFOVA, R.A.; TAIROV, Ch.A.

Cretaceous stratigraphy of the Sovetabad area in the Caspian Sea
region. Azerb.neft.khoz. 39 no.8:8-9 Ag '60.   (MIRA 13:11)
                (Caspian Sea region--Geolody, Stratigraphic)

KHALAFOVA, R.A.

Conditions of contact of the Upper Cretaceous with underlying sediments in the northwestern Nakhichevan A.S.S.R. Izv. vys. ucheb. zav.; neft' i gaz 4 no.12:27-31 '61.   (MIRA 16:12)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.

KHALAFOVA, Z.A.

Some new species of Inoceramus from Conjacian sediments in the Nakhichevan A.S.S.R. Dokl.AN Azerb.SSR 20 no.10:33-38 '64.
(MIRA 18:)

1. Institut nefti i khimii AN Azerb.SSR.

KHALAFOVA, R.A.

New species of the Upper Cretaceous Plicatula in the Nakhichevan A.S.S.R. and adjacent areas of the Lesser Caucasus. Izv.AN Azerb. SSR. Ser.geol.-geog.nauk no.1:46-56 '65.

(MIRA 18:8)

KHALAIM, A.F.; SOLOV'YEVA, S.V.

Making full use of production resources. Spirt. prom. 25 no.5:36-37
'59.   (MIRA 12:10)
           (Distilling industries)

KHALAIM, A.F.

KHALAIM, A.F.

Use all slops for cattle feeding. Spirt.prom.20 no.1:18 '54.
(MLRA 7:5)
(Feeding and feeding stuffs) (Distilling industries--By-products)

PRYGULA, V.I., LLANLANKIU, G.P.; KHALABUGA, G.I.

Intensification of synthesis of Δ^1 steroid dehydrogenase by the Mycobacterium globiforme 193 culture with the help of hydrocorti- sone. Prikl. biokhim. i mikrobiol. 1 no.3:322-326 My-Je 1965.

(MIRA 18:7)

1. Institut mikrobiologii AN SSSR.

KHALAIMOVA, N.I., ekonomist-planovik kolkhoza; LIPIN, A.D.

Taking quantity and quality into account. Nauka i pered. op. v
sel'khoz. 7 no.5:11-14 My '57.   (MIRA 10:6).

1. Starshiy nauchnyy sotrudnik khlopkovoy zonal'noy opytnoy stantsii
(TANIIZ).

(Wages)   (Collective farms)

MAKSUTOV, R.A.; DOBROSKOK, B.Ye.; ZHDANOV, M.M.; KHALAMAN, B.S.;
PUSTOVOYT, S.P.

Field testing of equipment designed for separate injection
of water into two layers. Nefteprom.delo no.10:10-13 '65.
(MIRA 19:1)

1. Tatarskiy neftyanoy nauchno-issledovatel'skiy institut i
Ob"yedineniye neftyanoy promyshlennosti Tatarskoy ASSR
Ministerstva neftyanoy promyshlennosti SSSR.

KHALAMEYZER, V.P.(ENGR)

Electric Motors

Automatic cutting-off of motors from the network during the short-circuiting of one of the phases to the housing. Prom. energ. 9, No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952, UNCLASSIFIED

KHALAMEYZER, M. B.

AID P - 3345

Subject   : USSR/Electricity

Card 1/2   Pub. 29 - 3/27

Author   : Khalameyzer, M. B., Eng.

Title   : Automatic reclosure of magnetic starters of low-
                  voltage electric motors

Periodical   : Energetik, 9, 7-10, S 1955

Abstract   : The author describes a basic connection diagram of an
                  installation for automatic reclosure of magnetic
                  starters of low-voltage electric motors. The mecha-
                  nical time-relays used are produced at the Central
                  Studio of Documentary Films. The editors in a note
                  consider the arrangement described as workable and
                  efficient except for the much too complicated struc-
                  ture of the mechanical time-relay. They suggest a
                  simplified relay of the RE type. They also quote
                  extracts from the Accident Prevention Circular
                  No. E-8/54 of the Ministry of Electric Power Stations
                  concerning the problem under discussion. Three
                  photographs, 1 connection diagram.

AID P - 3345
Energetik, 9, 7-10, S 1955

Card 2/2   Pub. 29 - 3/27

Institution : None

Submitted   : No date

1205.   AN INSTRUMENT FOR BUYCE

KHALAMEYZER, M. B.

KHALAMEYZER, M. B.: "Some problems of the stabilization of the technological
    systems of processing color film." Min culture USSR. All-Union Sci Res
    Cinema Inst (NIKFI). Moscow, 1956. (Dissertation for the Degree of
    Technical Science.)

So: Knizhnaya letopis', No. 37, 1956. Moscow.

KHALAMEYZER, M.B.

of Multi-Layer Colour Film. M. B. KHALAMEIZER

LEVITAN, S.A., kand.tekhn.nauk; KHALAMEYZER, M.B., inzh.

Regulating the temperature in the processing of color film.
Trudy MEI no.27:330-339 '58.   (MIRA 13:4)

1. TSentral'naya kinostudiya dokumental'nykh fil'mov.
        (Color photography)

KHALAMEYZER, M.B.

Automatic temperature regulation in the processing of motion-picture
films. Tekh.kino i telev. 4 no.10:20-29 O'60.   (MIRA 13:10)
                        (Temperature regulators)
        (Motion-picture photography--Equipment and supplies)

KHALAMEYZER, Mikhail Borisovich; SABASHNIKOVA, Ye.S., red.; MALEK,
    Z.N., tekhn. red.

        [Automatic control in the processing of motion-picture films]
        Elementy avtomatiki v protsessakh obrabotki kinoplenki. Mo-
        skva, Gos. izd-vo "Iskusstvo," 1961. 183 p.   (MIRA 15:2)
            (Motion-picture photography—Films)
                (Automatic control)

l.1782
S/194/62/000/008/053/100
D413/D308

5,5300

AUTHOR: Khalameyzer, M.B.

TITLE: An automatic recording and integrating densitometer
for paper chromatography

TEXT: This densitometer is designed for the quantitative determina-
tion of various substances that have been separated by the technique
of chromatography or electrophoresis on paper. The quantitative de-
termination of the separated substances is made by photometric mea-
surement in transmitted light of the color intensity of chromato-
gram spots. The results are obtained in the form of a curve repre-
senting the absorption of light by each spot. Then one determines
the area enclosed by the curve and the density line for clean paper.
For calculation, known fixed amounts of substance are applied to
chromatographic paper and the developed chromatogram is recorded on
the densitometer. By integrating the curves obtained for various
Card 1/3

S/194/62/000/008/053/100
D413/D308

An automatic recording and ...

quantities of substance, one can construct calibration curves re-
lating the concentration of substance in mg to the area of the ab-
sorption curve in mm². The densitometer consists of a photoelectric
indicator (the densitometer proper); an automatic recording elec-
tronic potentiometer; an integrator built into the potentiometer;
and an impulse counter. Two plug-in photocells are used, of types
CUS-3 (STsV-3) and U5-3 (TsV-3), which in conjunction with light
filters give the necessary sensitivity over the whole visible spec-
trum. The photocell output is amplified in a balanced circuit. The
start of the scale, corresponding to 100 % transmission of the
light by the chromatographic paper, is determined by a neutral grey
optical wedge; while the end of the scale, for the photocell com-
pletely in the dark, is set by a variable resistor. Two versions
of integrator have been developed for automatically finding the
areas under the curves. The first uses a DC electric motor whose
speed of rotation depends linearly on the voltage applied to it.
Hence the angle through which the motor armature turns is propor-
tional to the integral of the applied voltage over the time from
the start of the rotation. The second version uses a device for in-
tegrating the function given by the displacement of an instrument
Card 2/3

KHALAMEYZER, M.B.; DAVYDOV, Yu.S., kand. tekhn. nauk, retsenzent;
KURATTSEV, L.Ye., inzh., red.izd-va; EL'KIND, V.D.,
tekhn. red.

[Fundamentals of the automatic control of airconditioning
systems] Osnovy avtomaticheskogo regulirovaniia ustanovok
iskusstvennogo klimata. Moskva, Mashgiz, 1963. 215 p.
                                        (MIRA 16:10)
(Air conditioning--Equipment and supplies)
(Automatic control)

S/187/63/000/002/002/004
A004/A126

AUTHORS: Khalameyzer, M. B., Murey, I. A.

TITLE: Using control systems of discrete action for automating the condi-
tions of cinematic technological processes

PERIODICAL: Tekhnika kino i televideniya, no. 2, 1963, 27 - 36

TEXT: The authors present the necessary theoretical prerequisites and con-
crete solutions for the design of relay-pulse controllers. As an example, they
present the automation diagram for a development machine using a system of multi-
channel relay-pulse controllers, and analyze problems of dependability of multi-
channel installations. As a result of the investigations carried out it was found
that relay-pulse controllers of automatic control can be used in most cinematic
technological processes. Based on the unit system of three-position control with
relay elements, an electronic relay controller for the centralized control of heat
conditions has been developed. The use of this type of control apparatus permits
considerable cuts in capital expenditure and operating costs for automatic systems
and ensures a high control quality. A combination of multichannel electronic re-
lay control systems with identical systems operating on the "limiting" controller

Card 1/2

L 18168-63.   BDS

ACCESSION NR: AP3004309   S/0030/63/000/007/0080/0083

AUTHOR: Khalameyzer, M. B.

TITLE: Densitometer with contactless integrator   48

SOURCE: AN SSSR. Vestnik, no. 7, 1963, 80-83

TOPIC TAGS: concentration, absorption, densitometer, integrator, photographic plate

ABSTRACT: A densitometer was constructed to determine quantitatively the concentration of each substance in a solution from a color-sensitive photographic plate. A contactless integrator was used to plot concentration (in micrograms) against the area under the luminous absorption curve (in mm^2). The major components of the instrument are: 1) a photoelectric indicator (the densitometer proper) which operates with a set of color filters to produce a monochromatic measurement, 2) an automatic potentiometer, 3) an integrator, and 4) a pulse counter. The novel feature in the instrument is the integrator which automatically determines the area under the absorption curve and transfers this information to the recording potentiometer. It is found that the densitometer-integrator can be useful in determining a wide range of concentration measurements with good accuracy (within 0.3%). Orig. art. has: 2 photographs and 1 diagram.

Card 1/2

KHALAMEYZER, M.B., kand. tekhn. nauk

Automation of industrial air conditioning systems. Prom. energ.
18 no.5:10-16 My '63.   (MIRA 16:6)

(Air conditioning)

KHALAMEYZER, M.B.; AVEN O.I., kand. tekhn. nauk, retsenzent

[Integrating devices of automatic compensators] Integri-
ruiushchie ustroistva avtomaticheskikh kompensatorov.
Moskva, Mashinostroenie, 1964. 104 p.   (MIRA 17:9)

USSR

ACCESSION NR: AP4002997   S/0286/63/000/018/0106/0106

AUTHOR: Khalameyzer, M. B.

TITLE: Photoelectric device for function integration. Class 42, No. 144037

SOURCE: Byul. izobret. i tovarn. znakov, no. 18, 1963, 106

TOPIC TAGS: function integration, photoelectric device, function integration
device, pulse counter, photoelectric integrator, function integrator

ABSTRACT: A photoelectric device for function integration, containing an inte-
grating element made in the form of a drum with a black-white surface, a counting
photohead, a pulse counter connected in series to a photoresistive circuit, and a
light source. The distinguishing feature is acceleration of the process of func-
tion integration, of the given shift register, and of the recording device. In
it the photohead is rigidly connected to the register and the white surface of
the integrating element (drum) is prepared in relation to the scale of the device,

Card 1/2

ACCESSION NR: AP4002997

so that each position of the register corresponds to a pre-determined photohead path above the white surface, and consequently, a predetermined number of pulses.

SUBMITTED: 08May61   DATE ACQ: 13Dec63   ENCL: 00

SUB CODE: SD, MM   NO REF SOV: 000   OTHER: 000

ASSOCIATION: none

Card 2/2

AUTHOR: Khalamez, A.   107-58-7-19/43

TITLE: The "Kazan'-57" Portable Radio-phonograph (Perenosnaya radiola "Kazan'-57")

PERIODICAL: Radio, 1958, Nr 7, pp 25-26 (USSR)

ABSTRACT: This radio-phonograph is designed for the reception of long and medium waves, gramophone reproduction and for use with the tape-recorder attachments "MP-1" and "MP-2". Using trimmer condensers and push-button selection the set has a choice of 7 stations. The nominal output is not less than 1 w and sensitivity with an output power of 50 mw is around 500 microvolts. Sensitivity of the pick up assembly is 250 microvolts. The set works off the 127v or 220v ac grid. The "Kazan'-57" constitutes a 4-tube superheterodyne. Details of the construction, lay-out and coil assembly of the receiver, record player and switching unit are given.
There are 2 drawings, 1 circuit diagram and 1 table.

1. Radio-phonographs--Equipment

Card 1/1

KHALAMEZ, A., inzh.

"Kazan-2" radio-phonograph and magnetic tape recorder com-
bination. Radio no.4:22-25 Ap '61.   (MIRA 14:7)

(Magnetic recorders and recording) (Phonograph)
(Radio—Receivers and reception)

KHALANAY, A. (Bukharest)

Asymptotic stability and small perturbations of periodic systems
of differential equations with delayed argument. Usp.mat.nauk 17
no.1:231-233 Ja-F '62.   (MIRA 15:3)
                         (Differential equations)

AUTHOR: Khalanay, A.

TITLE: Periodic solutions of systems with delay, with a small parameter in the critical case

TEXT: The author considers a system of integro-differential equations

$$\dot{x}(t) = \int_{-\infty}^{0} x(t+s)\, d_s\, \eta(t,s) + f(t) + \varepsilon F[t, x(t+s), \varepsilon], \qquad (1)$$

where x, f, and F are n-dimensional column-vectors, $\eta(t,s) \equiv \{\eta_{ij}(t,s)\}$ is a square $n \times n$ matrix $(i, j = 1, \ldots, n)$ with elements $\eta_{ij}(t,s)$ being functions of t and s, defined for $t \geq 0$ and $-\infty < s < +\infty$; $\eta(t,s) \equiv (0)$ for $s \geq 0$; there are functions $\tau_{ij}(t)$ and $V_{ij}(t)$ bounded for $t \geq 0$ such that

Card 1/4

Periodic solutions of systems with delay, ...

$\eta_{ij}(t,s) \equiv \eta_{ij}(t, -\tau_{ij}(t)) \equiv 0$ for $s \leq -\tau_{ij}(t)$; the total variation with respect to s of the function $\eta_{ij}(t,s)$ on the interval $-\tau_{ij}(t) \leq s \leq 0$ is equal to

$$\bigvee_{s=-\tau_{ij}(t)}^{s=0} \eta_{ij}(t,s) \leq V_{ij}(t);$$

the functions $\eta_{ij}(t,s)$ are continuous in t, uniformly relative to s; all the functions $\eta(t,s)$, $f(t)$, $\tau_{ij}(t)$, $V_{ij}(t)$, and $F(t, \varphi, \varepsilon)$ are periodic in t with period $\omega > \tau = \sup_{i,j,t>0} \tau_{ij}(t)$. It is also assumed that with fixed t and ε the components F are functionals defined in the space of continuous n-dimensional column-vector functions specified in the interval $[-\tau, 0]$ and, moreover, that F satisfies the Lipshitz condition with respect to φ, i.e., $|F(t, \varphi_1, \varepsilon) - F(t, \varphi_2, \varepsilon)| \leq L\|\varphi_1 - \varphi_2\|$, where L is a constant independent of φ, and $\|\varphi_1 - \varphi_2\|$ is the Euclidean norm. The author has previously proven that, if a homogeneous system (1) (with $\varepsilon = 0$ and $f(t) \equiv 0$) has periodic solutions with period ω, then there exists only a finite number k of such linearly independent solutions $p_j(t)$, $j = 1, \ldots, k$. Then also the conjugate

Card 2/4

Periodic solutions of systems with delay, ...   S/044/62/000/011/019/064
                                                   A060/A000

system has the same number k of linearly independent solutions $p_j(t)$, $j = 1$,

..., k. If then $\int_0^\omega f(t) q_j(t) dt = 0$ for all $j = 1, ..., k$, then there ex-

ists one unique periodic solution $p(t)$ of the system (1) for $\epsilon = 0$. It is de-
monstrated that, if the Jacobian

$$\frac{\partial (p_1, ..., p_k)}{\partial (\alpha_1, ..., \alpha_k)} \neq 0 \quad \text{for} \quad \alpha_j = \alpha_j^0 \quad \text{and} \quad \epsilon = 0, \quad \text{where} \quad \alpha_j^0 \quad \text{are constants, and}$$

$$p_j(\alpha_1, ..., \alpha_k, \epsilon) = \int_0^\omega F\left[t, p(t+s) + \sum_{i=1}^k \alpha_i p_i(t+s), \epsilon\right] q_j(t) dt$$

and, moreover, $P_j(\alpha_1^0, ..., \alpha_k^0, 0) = 0$, then for a sufficiently small $|\epsilon| < \epsilon_0$
there exists a periodic solution $x(t, \epsilon)$ with period ω of the system (1)
such, that

$$\lim_{\epsilon \to 0} x(t, \epsilon) = p(t) = \sum_{j=1}^k \alpha_j^0 p_j(t).$$

Card 3/4

Periodic solutions of systems with delay, ...   S/044/62/000/011/019/064
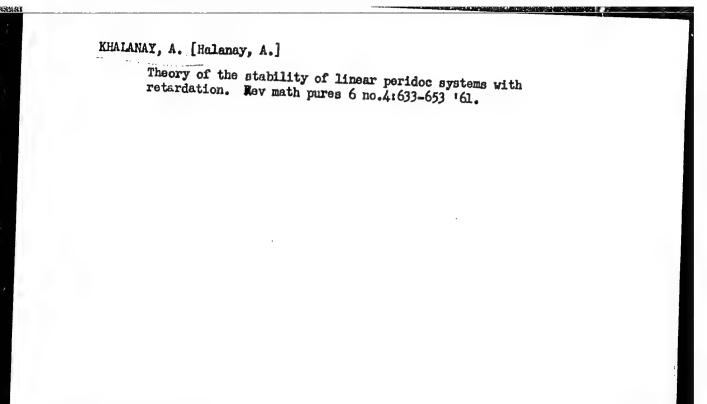   A060/A000

The proof of this proposition is simple (by the method of successive approxima-
tions). A proof is also given of two more comparison theorems for a system of
the form

$$\dot{x}(t) = f\left[t, x(t), x(t - \tau), \epsilon\right],$$

where x and f are n-dimensional column-vectors, and f is a periodic function of t   (2)
with period $\omega > \tau$; the first theorem refers to the nonautonomic and the second
to the autonomic case of (2). The paper is written very concisely and contains
numerous important applications.

                                                   B.V. Shirokorad

[Abstracter's note: Complete translation]

Card 4/4

KHALANAY, A. [Halanay, A.]

Theory of the stability of linear peridoc systems with retardation. Rev math pures 6 no.4:633-653 '61.

16.3400

AUTHOR: Khalanay, A.

TITLE: The condition of Perron in the theory of general systems with aftereffect

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1962, 51, abstract 2B231. ("Mathematica (RPR)", 1960, 2, no. 2, 257-267)

TEXT: The author considers the system of equations

$$\dot{x}(t) = \int_{-\infty}^{0} x(t+s)d_s\, \eta(t,s) + f(t) \qquad (1)$$

where $x(t)$ and $f(t)$ -- vectors and $\eta(t,s)$ is a matrix satisfying certain conditions. System

$$\dot{x}(t) = \int_{-\infty}^{0} x(t+s)d_s\, \eta(t,s) \qquad (2)$$

is said to satisfy the Perron condition, if the solution of (1)

Card 1/2

S/044/63/000/002/018/050
A060/A126

AUTHOR: Khalanay, A.

TITLE: Autonomic systems with lagging argument with a small parameter

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 43 - 44, abstract
             2B194 (Rev. math. pures et apll., (RPR), 1962, v. 7, no. 1, 81 - 89)

TEXT: The author considers an autonomic system with constant lag $\tau > 0$:
$$\dot{x}(t) = f\left[x(t), x(t - \tau), 0\right], \tag{1}$$
where $x(t)$ is an n-vector. It is assumed that the generating system
$\dot{x}(t) = f\left[x(t), x(t - \tau), \Delta\right]$ has a family of periodic solutions $p(t, c_1, c_2, \ldots, c_k)$ with period $T_0(c_1, c_2, \ldots, c_k) > \tau$. Under certain constraints he finds the necessary and sufficient conditions for the existence for $|\varepsilon| < \varepsilon_0$ of a periodic solution of system (1), which as $\varepsilon \rightarrow 0$ tends to some periodic solution of the generating system. The method of successive approximations is used for the proof of the sufficiency of the obtained conditions.

                                                    L.E. El'sgol'ts

[Abstracter's note: Complete translation]

Card 1/1

AUTHOR: Khalanay, A.

TITLE: Singular perturbations of systems with lagging argument

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 44, abstract 2B195.
            (Rev. math. pures et appl. (RPR), 1962, v. 7, no. 2, 301 - 308)

TEXT: The author considers a system of the form
$$\dot{x}(t) = f\left[t, x(t), x(t - \tau), y(t), y(t - \tau), \varepsilon\right],$$
$$\varepsilon \dot{y}(t) = g\left(t, x(t), y(t), \varepsilon\right),$$
$\qquad\qquad$ (1)

where $\varepsilon > 0$, $\tau > 0$, f and g are time periodic functions with period $\omega > \tau$.
It is demonstrated that, if the degenerate system
$$\dot{x}(t) = f\left[t, x(t), x(t - \tau), y(t), y(t - \tau), 0\right],$$
$$g\left[t, x(t), y(t), 0\right] = 0$$
$\qquad\qquad$ (2)

has a periodic solution, then if certain conditions are fulfilled, for suffi-
ciently small ε the system (1) also has a periodic solution $x(t, \varepsilon)$, $y(t, \varepsilon)$.

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with as $\epsilon \rightarrow 0$ tends to the periodic solution of system (2). An analogous re-
sult is demonstrated also for almost-periodic solutions of equations (1) and (2)
on the assumption of almost-periodicity of the functions f and g with respect
to t. Some results are also obtained for the case of existence of a family of
periodic solutions for the system (2).

                                        L.E. El'sgol'ts

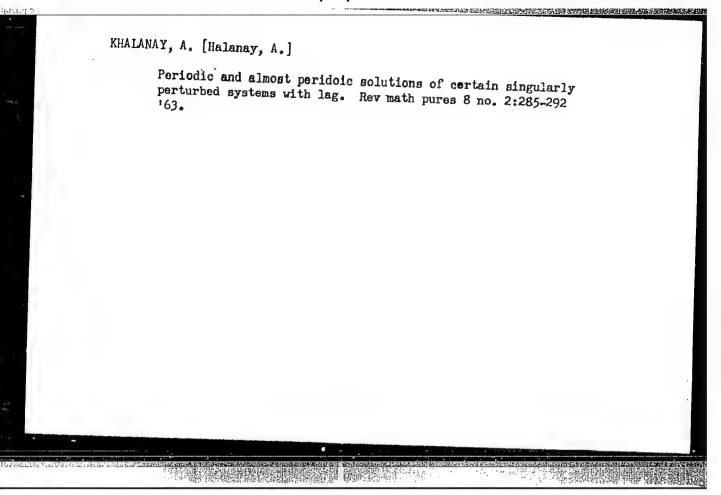[Abstracter's note: Complete translation]

Card 2/2

KHALANAY, A. [Halanay, A.]

Singualr disturbances of autonomous lagging systems.
Rev math pures 7 no. 4:627-631 '62.

KHALANAY, A. [Halanay, A.]

"Contributions to the theory of nonlinear oscillations,"
edited by Lamberto Cesari, J.P.La Salia, Solomon Lefshetz.
Vol. 5. Reviewed by A. Khalanay. Rev math pures 7 no. 4:
722-724 '62.

KHALANAY, A. [Halanay, A.]

Periodic and almost peridoic solutions of certain singularly
perturbed systems with lag. Rev math pures 8 no. 2:285-292
'63.

KHALANAY, A. [Halanay, A.]

Quasi-periodic solutions of the systems with small parameters in
certain critical cases. Rev math pures 8 no.3:397-403 '63.

KHALANAY, A. [Halanay, A.]

Systems of a canonical type with deviating argument and with periodic coefficients. Rev math pures 8 no.4:569-573 '63.

"An exposition of adaptive control." Reviewed by A. Khalanay. Ibid.: 702-703 '63.

KHALANAY, A. [Halanay, A.]

"Discrete and continuous boundary problems" by F.V.Atkinson. Vol. 8. Reviewed by A. Khalanay. Rev math Roum 10 no.2:211-212 '65.

POPOV, V. (Bukharest); KHALANAY, A. [Halanay, A.] (Bukharest)

Concerning the stability of nonlinear automatic control systems
with lag argument. Avtom. i telem. 23 no.7:849-851 Jl '62.
(MIRA 15:9)

(Automatic control)